

Patent Abstracts of Japan

PUBLICATION NUMBER : 08289538
PUBLICATION DATE : 01-11-96

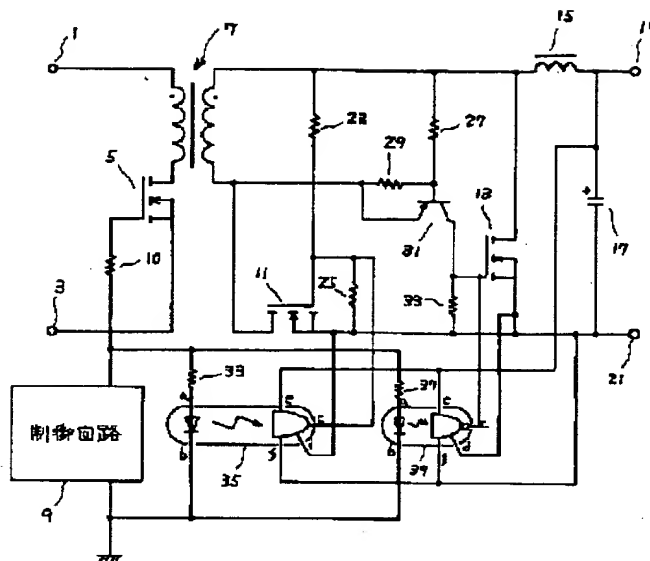
APPLICATION DATE : 18-04-95
APPLICATION NUMBER : 07116481

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INT.CL. : H02M 3/28 H02J 1/00 H02M 7/21

TITLE : DC-DC CONVERTER



ABSTRACT : PURPOSE: To prevent a malfunction caused by noise voltage, etc. while a switching device is in an off-state, in a synchronous commutation method DC-DC converter which uses the field control-type switching device such as a FET.

CONSTITUTION: By turning a switching device 5 serially connected to a primary winding of a transformer 7 on and off, AC voltage is taken out on a secondary side of the transformer 7. The taken-out AC voltage is rectified by a FET 11 for rectifying which is serially connected to a secondary winding of the transformer. A choke coil 15, a capacitor 17, and a FET 13 for free-wheeling constitute a synchronous commutation-method DC-DC converter. Although the FET 11 for rectifying and the FET 13 for free-wheeling turn off in different zones, a section between a gate and a source of each FET is shorted by means of signals from a controlling circuit 9 through photocouplers 35 and 37 in an off-state zone of each FET and thereby a malfunction caused by noise voltage, etc., is prevented.

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